

Table SI. Sequences of RT-qPCR primers and siRNAs used in the present study.		
Sequences of siRNAs		
Gene name	Sense (5'-3')	Antisense (5'-3')
EGR1 ^{siRNA}	GAUGAACGCAAGAGGCAUAAU	PUAUGCCUCUUGCGUUCAUCUU
EGR1 ^{control}	GAUAUGACGACAGAGAUAAU	PUAUCUCUGUCGUCAUAUCUU
CHD1 ^{siRNA}	GGAGAGAUUCAGUAUUUAAAU	UUAAAUACUGAAUCUCUCCUG
CHD1 ^{control}	GGAAGAUUCCCAGUAAUUAAAU	UUAAUUACUGGGAAUCUCCUG
FGF21 ^{siRNA}	GGUUAUUUAUCUUAUUUAAUU	AUAAAUAAAGAUAAAUAAACCUA
FGF21 ^{control}	UGAUAUUAACUCUAUGUAUUU	AUACAUAGAGUAAUAUCAUA
For mice		
Gene name	Forward primer (5'-3')	Reverse primer (5'-3')
FASN	GGAGGTGGTGATAGCCGGTAT	TGGGTAATCCATAGAGCCCAG
CPT1 α	CTCCGCCTGAGCCATGAAG	CACCAGTGATGATGCCATTCT
miR212-3p	ACACTCCAGCTGGGTAACAGTCTCCAGT	TGGTGTCGTGGAGTCG
β -actin	GGCTGTATTCCCCTCCATCG	CCAGTTGGTAACAATGCCATGT
For humans		
Gene name	Forward primer (5'-3')	Reverse primer (5'-3')
EGR1	GGTCAGTGGCCTAGTGAGC	GTGCCGCTGAGTAAATGGGA
FGF21	CTGTGGGTTTCTGTGCTGG	CCGGCTTCAAGGCTTTCAG
CHD1	GTAGCCAGTCAGGTAGCAGTG	ACTTTCGGTGGTTTTGCTTGAA
miR212-3p	ACACTCCAGCTGGGTAACAGTCTCCAG	TGGTGTCGTGGAGTCG
β -actin	CATGTACGTTGCTATCCAGGC	CTCCTTAATGTCACGCACGAT
U6	CTCGCTTCGGCAGCACA	AACGCTTACGAATTTGCGT
EGR1, early growth response 1; FGF21, fibroblast growth factor 21; CHD1, chromodomain helicase DNA binding protein 1; FASN, fatty acid synthase; PPAR α , peroxisome proliferator activated receptor α .		

Table SII. Expression of miR-212-3p and miR-212-5p in the microarray.

Systematic name	P-value	Fold change	Regulation
miR-212-3p (Chow vs. HFD)	0.001	4.361	Up
miR-212-3p (HFD vs. HE)	0.004	3.421	Down
miR-212-5p (Chow vs. HFD)	0.310	1.158	Up
miR-212-5p (HFD vs. HE)	0.045	1.305	Down

HFD, high-fat diet; HE, high-fat diet and exercise.

Table SIII. Potential upstream regulators of miR-212 predicted by Jasper and RegRNA 2.0.

Transcription factor	Score in mice	Score in humans
EGR1	19.6386	18.1039
SP1	17.3958	17.3958
CREB1	14.9162	14.716
Ahr::Arnt	9.19659	9.19659
E2F1	13.6374	
NFE2L2	13.5578	
Ets1	13.215	
Gabpa	13.1723	
ELK1	11.6506	
Pax5	9.77507	
MZF1	9.08528	
AFT2	7.02718	
SOX9		9.066076
Myc		14.6206
MAX		13.1326
Mafb		8.91059
Gata1		7.01644
SRY		8.86562